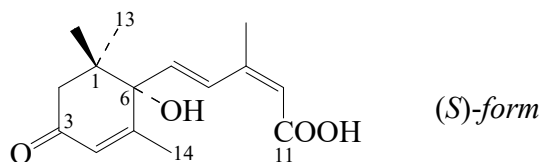




>>Entry Name: Absciscic acid

Synonym(s): 5-(1-Hydroxy-2,6,6-trimethyl-4-oxo-2-cyclohexen-1-yl)-3-methyl-2,4-pentadienoic acid, 9Cl. Abscisin II. Dormin



CAS Registry Number: 7773-56-0

Related CAS Registry Numbers(s): 6735-04-2 6755-41-5 14398-53-9 14674-85-2 40331-02-0 58801-55-1 69350-43-2 69350-44-3 78340-30-4 79199-48-7 97806-70-7

Extra CAS Registry Numbers(s): 2228-72-0 52392-36-6

Molecular Formula: C₁₅H₂₀O₄

Molecular Weight: 264.321

Accurate Mass: 264.13616

Percentage Composition: C 68.16%; H 7.63%; O 24.21%

General Statement: Terpenoid (cyclofarnesane) numbering shown. Other schemes freq. encountered

UV: [acid] λ_{max} 252 (ε 25200) (no solvent reported) (Derep) [base] λ_{max} 244 (ε 25000) (EtOH/NaOH) (Derep) [neutral] λ_{max} 245 (sh) (ε); 260 (ε 21300) (EtOH) (Derep)

Aldrich: 86225-8

Fluka: 12

Sigma: A4906

>>Variant: (S)-form

CAS Registry Number: 21293-29-8

Extra CAS Registry Numbers(s): 72029-68-6 72029-69-7

Molecular Formula: C₁₅H₂₀O₄

Molecular Weight: 264.321

Accurate Mass: 264.13616

Percentage Composition: C 68.16%; H 7.63%; O 24.21%

Biological Source: Constit. of sycamore, birch, rose, cabbage, potato, lemon etc.

Use/Importance: Used to regulate fruit ripening

Biological Use/Importance: Abscission-accelerating substance. Plays a role in plant signal transduction and pest resistance of plants

Physical Description: Cryst. (CHCl₃/petrol)

Melting Point: Mp 160-161°

Optical Rotation: [α]_D +430

Other Data: The incorrect abs. config. was formerly assigned

>>Derivative: β-D-Glucopyranosyl ester

Synonym(s): Abscisyl β-D-glucopyranoside

CAS Registry Number: 21414-42-6

Molecular Formula: C₂₁H₃₀O₉

Molecular Weight: 426.463

Accurate Mass: 426.188985

Percentage Composition: C 59.14%; H 7.09%; O 33.76%

Biological Source: Isol. from immature fruits of *Lupinus luteus*

Biological Use/Importance: Growth inhibitor

Melting Point: Mp 114°

Optical Rotation: [α]_D¹⁷ +180 (c, 0.35 in EtOH)

>>Derivative: 11-Aldehyde

Synonym(s): Absciscic aldehyde

CAS Registry Number: 41944-86-9

Molecular Formula: C₁₅H₂₀O₃

Molecular Weight: 248.321

Accurate Mass: 248.141245

Percentage Composition: C 72.55%; H 8.12%; O 19.33%

Biological Source: Immediate precursor of absciscic acid

Physical Description: Cryst. (CH₂Cl₂/hexane)

Melting Point: Mp 127-128°

Optical Rotation: [α]_D²⁰ +450.5 (c, 1 in EtOH)